

WHAT IS CLAIMED IS:

1        1.    A communications method, comprising:  
2                monitoring a simplified message desk interface  
3        (SMDI) communications link to detect a SMDI message;  
4                generating an Internet Protocol (IP) message  
5        including at least one IP packet, said IP packet  
6        including at least some information obtained from a  
7        detected SMDI message; and  
8                transmitting the IP message over a  
9        communications channel which supports the transmission of  
10       IP packets.

1        2.    The communications method of claim 1, wherein said  
2        SMDI communications link includes an RS-232 cable  
3        connecting a voice message system to telephone switching  
4        circuitry, the method further comprising:  
5                prior to performing said monitoring step,  
6        inserting a tee connection into said SMDI communications  
7        link to allow for monitoring of said link.

1        3.    The communications method of claim 1, further  
2        comprising:  
3                in response to detecting a SMDI message waiting  
4        indicator control message, performing a database look-up  
5        operation to retrieve IP message routing information  
6        associated with a directory number included in the  
7        detected SMDI message; and

8                    wherein the step of generating an IP message  
9       includes including at least some of the retrieved IP  
10      message routing information in said IP message.

1       4.    The communications method of claim 3, wherein the IP  
2       message is an E-mail message and wherein the IP message  
3       routing information includes an E-mail address.

1       5.    The communications method of claim 3, wherein said  
2       IP message routing information includes an IP address.

1       6.    The communications method of claim 1, further  
2       comprising:  
3                in response to detecting a SMDI history  
4       message, storing at least some information included in  
5       the SMDI history message.

1       7.    The method of claim 6, wherein the step of  
2       generating an IP message includes:  
3                incorporating at least some of the stored  
4       information obtained from the SMDI history message in  
5       said IP message.

1       8.    The communications method of claim 6, further  
2       comprising:  
3                in response to detecting a SMDI message waiting  
4       indicator control message,

5           using directory number information included in  
6     the SMDI message waiting indicator control message to  
7     retrieve stored SMDI history message information.

1     9.    The communications method of claim 8, wherein the  
2     step of generating an IP message includes incorporating  
3     at least some of the retrieved IP history message  
4     information in said IP message.

1     10.   The communications method of claim 9, wherein at  
2     least some of the retrieved IP history message  
3     information includes at least one of a calling party name  
4     and a calling party telephone number.

1     11.   The communications method of claim 10, wherein said  
2     IP message is an E-mail message.

1     12.   The communications method of claim 9, wherein the  
2     step of generating an IP message further includes  
3     incorporating at least some information from the detected  
4     SMDI message waiting indicator control message in said IP  
5     message.

1     13.   A method of operating an Internet Protocol messaging  
2     device the method comprising:  
3            receiving a simplified message desk interface  
4     (SMDI) message;

5           generating an Internet Protocol (IP) message  
6       including at least one IP packet and at least some  
7       information obtained from the received SMDI message; and  
8           transmitting the IP message to an IP  
9       communications network.

1       14. The method of claim 13,  
2           wherein the step of receiving a SMDI message  
3       includes receiving one of a frequency shift keying and a  
4       phase shift keying encoded signals; and  
5           wherein the step of generating an IP message  
6       includes the step of including a message waiting  
7       indicator control signal obtained from the received SMDI  
8       message in said IP message.

1       15. The method of claim 13, further comprising:  
2           using information in a received SMDI message to  
3       access a database including Internet Protocol address  
4       information; and  
5           using at least some of the retrieved Internet  
6       Protocol address information in said IP message.

1       16. The method of claim 15,  
2           wherein the Internet Protocol address  
3       information includes an E-mail address; and  
4           wherein said IP message is an E-mail message.

1 17. The method of claim 16, further comprising:  
2 prior to receiving said SMDI message, receiving  
3 Internet Protocol address information and directory  
4 number information for each of a plurality of voice mail  
5 service subscribers from a service control point coupled  
6 to said Internet Protocol messaging device.

1 18. The method of claim 17, wherein using information in  
2 a received SMDI message to access a database including  
3 Internet Protocol address information, includes comparing  
4 a directory number or message line indicator received in  
5 said SMDI message to said directory number information  
6 received from the service control point.

1 19. A communications system, comprising:  
2 a telephone switch;  
3 a voice messaging system;  
4 a communications link coupled to the telephone  
5 switch and to the voice messaging system for carrying  
6 voice message waiting information between voice messaging  
7 system and the telephone switch; and  
8 an Internet Protocol message server coupled to  
9 said communications link for detecting voice message  
10 waiting information transmitted over said communications  
11 link and for generating an Internet Protocol message  
12 including at least some of said voice message waiting  
13 information.

1 20. The communications system of claim 19, wherein said  
2 voice messaging waiting information is a message waiting  
3 indicator control signal.

1 21. The communications system of claim 20, further  
2 comprising:

3 a voice message retrieval device coupled to  
4 said Internet Protocol message server by an Internet  
5 Protocol communications channel, the voice message  
6 retrieval device operating to retrieve a waiting message  
7 from said voice messaging system in response to receiving  
8 an IP message including operate message waiting indicator  
9 information.

1 22. The communications system of claim 20, wherein said  
2 communications link is a simplified message desk  
3 interface link.

1 23. The communication system of claim 22, wherein the  
2 Internet Protocol server includes:

3 means for decoding at least one of a Frequency  
4 Shift Keying signal and a Phase Shift Keying signal to  
5 generate decoded simplified message desk interface  
6 message information; and

7 means for generating an IP message including at  
8 least some of said decoded simplified message desk  
9 interface message information.

1 24. The communication system of claim 23, wherein the  
2 Internet Protocol message server further includes:  
3 a database of voice message service subscriber  
4 information including directory number and Internet  
5 Protocol address information.

1 25. The communication system of claim 19, wherein the  
2 Internet Protocol message server further includes:  
3 a database of voice message service subscriber  
4 information including directory number and Internet  
5 Protocol address information.

1 26. A message server for generating Internet Protocol  
2 (IP) messages from simplified message desk interface  
3 messages, the message server comprising:  
4 means for receiving simplified message desk  
5 interface messages from a simplified message desk  
6 interface data link;  
7 stored Internet address information; and  
8 an Internet Protocol message generation module  
9 for generating an Internet Protocol message including IP  
10 address information and at least some information  
11 obtained from a received simplified message desk  
12 interface data link.

1 27. The message server of claim 26, wherein the stored  
2 Internet address information includes E-mail addresses of  
3 voice message service subscribers.

1 28. The message server of claim 26, further comprising:  
2 a simplified message desk interface history  
3 message store for storing received history messages.

1 29. The message server of claim 28, wherein the Internet  
2 Protocol message generation module includes at least a  
3 portion of a routine for accessing a stored history  
4 message to obtain calling party name or directory number  
5 information.

1 30. A system for providing voice messaging service to a  
2 plurality of message service subscribers, the system  
3 comprising:  
4 a telephone switch;  
5 a voice messaging system;  
6 a simplified message desk interface  
7 communications channel coupling the voice messaging  
8 system to the telephone switch;  
9 an Internet Protocol network for communicating  
10 messages using the Internet Protocol; and  
11 an Internet Protocol message server coupled to  
12 the simplified message desk interface communications  
13 channel and to the Internet Protocol network, the  
14 Internet Protocol message server generating IP messages  
15 from simplified message desk interface messages  
16 transmitted over said simplified message desk interface  
17 communications channel.



1 31. The system of claim 30, further comprising:  
2 a service control point including subscriber  
3 service information and subscriber Internet address  
4 information; and  
5 a data network coupling the service control  
6 point to the telephone switch and to the Internet  
7 Protocol message server.

1 32. The system of claim 31, wherein the Internet  
2 Protocol message server includes a database of voice  
3 message service subscriber Internet address information  
4 and directory number information downloaded from the  
5 service control point.

1 33. The system of claim 31, further comprising:  
2 a voice message retrieval system coupled to the  
3 Internet Protocol message server by said Internet  
4 Protocol network, the voice message retrieval system  
5 operating to retrieve voice messages from said voice  
6 message retrieval system in response to Internet Protocol  
7 messages received from the Internet Protocol message  
8 server.